

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1-5. (Canceled)

6. (Currently Amended) An interlaced waveguide hologram comprising:

a first holographic recording; and

a second holographic recording interlaced with the first holographic recording, wherein each holographic recording is approximately 2.5 inches in width, each of the first and second holographic recordings is formed using a photolithographic mask and a view region mask, and each of the photolithographic mask and the view region mask has a series of light transmissive openings having selected inter-distance between the light transmissive openings.

7. (Previously Presented) The interlaced waveguide hologram of claim 6, wherein the first holographic recording corresponds to a first visual field and the second holographic recording corresponds to a second visual field.

8. (Previously Presented) The interlaced waveguide hologram of claim 7, wherein the first visual field is a right visual field and the second visual field is a left visual field.

9-10. (Canceled)

11. (Previously Presented) The interlaced waveguide hologram of claim 6, wherein the first holographic recording combines with the second holographic recording to create a three dimensional effect when in use.

12. (Currently Amended) A three-dimensional holographic liquid crystal display system comprising:

a. a backlight;

b- a first waveguide hologram;

e- a liquid crystal display[[,]]; and

d- a second waveguide hologram having a first holographic recording interlaced with a second holographic recording, [[said]] the second waveguide hologram being positioned between [[said]] the first waveguide hologram and the liquid crystal display and each of the first and second holographic recordings is approximately 2.5 inches in width.

13. (Previously Presented) The three-dimensional holographic liquid crystal display system of claim 12, further comprising a micro-collimator array positioned between the backlight and the first hologram.

14. (Previously Presented) The three-dimensional holographic liquid crystal display system of claim 12, wherein the backlight is collimated.

15. (Currently Amended) A method of making an interlaced waveguide hologram master comprising:

a- forming a first holographic recording by positioning a photolithographic mask at a first position over a substrate coated with emulsion and indexing fluid;

positioning a view region mask in a corresponding first position;

b- forming a second holographic recording by positioning the photolithographic mask at a second position wherein said second holographic recording is interlaced with said first holographic recording over the substrate coated with emulsion and indexing fluid; and

positioning a view region mask in a corresponding second position, wherein the second holographic recording is interlaced with the first holographic recording, the view region mask comprises a series of blacked out regions separated by a distance of approximately 2.5 inches; and each of the photolithographic and viewing masks has a series of light transmissive openings having selected inter-distance between the light transmissive openings.

16. (Currently Amended) The method of claim 15, wherein forming the first holographic recording further comprises:

positioning a photolithographic mask in a first position over a substrate coated with emulsion and indexing fluid;

positioning a view region mask in a corresponding first position, then forming the first holographic recording;

and, wherein forming the second holographic recording further comprises:

positioning the photolithographic mask in a second position over the substrate coated with emulsion and indexing fluid; and

positioning a view region mask in a corresponding second position, then forming the second holographic recording.

17. (Previously Presented) The method of claim 16, wherein the first position corresponds to a right viewing field and the second position corresponds to a left viewing field.

18. (Currently Amended) The method of claim 16, wherein the photolithographic mask comprises a series of equally spaced lines, wherein predetermined lines mask holographic recording ~~recording~~.

19. (Previously Presented) The method of claim 18, wherein each line has a width approximately equal to the width of a standard pixel.

20. (Previously Presented) The method of claim 19, wherein the width of each line is between approximately 200 to 300 microns.

21-22. (Canceled)

23. (Previously Presented) The method of claim 16, wherein the emulsion layer is formed of silver halide.

24. (Currently Amended) A method of making a three-dimensional holographic liquid crystal display system comprising:

- a. providing a first waveguide hologram;
 - b. providing a second waveguide hologram having a first holographic recording interlaced with a second holographic recording, wherein each holographic recording is approximately 2.5 inches in width, each of the first and second holographic recordings is formed using a photolithographic mask and a view region mask, and each of the photolithographic mask and the view region mask has a series of light transmissive openings having selected inter-distance between the light transmissive openings;
 - c. providing a backlight and a liquid crystal display[,]; and
 - d. arranging [[said]] the first waveguide hologram and [[said]] the second waveguide hologram between [[said]] the backlight and [[said]] the liquid crystal display so that [[said]] the first waveguide hologram is aligned adjacent to [[said]] the backlight and [[said]] the second waveguide hologram is aligned between [[said]] the first waveguide hologram and [[said]] the liquid crystal display.
25. (Currently Amended) The method of claim 24, further comprising positioning a micro-collimator array between the backlight and [[said]] the first hologram.